



PATENT
Atty. Dkt. AMAT/5975.P1/CPI/COPPER/LB/PJS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Chang, et al.

Serial No.: 10/634,662

Confirmation No.: 6355

Filed: August 4, 2003

For: Ruthenium Layer
Formation for Copper Film
Deposition

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Group Art Unit: 1762

**Examiner: Wesley D. Markham**

**MAIL STOP AMENDMENT**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

**CERTIFICATE OF MAILING**  
**37 CFR 1.8**

I hereby certify that this correspondence is being deposited on  
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5/23/05 Eric R. [Signature]  
Date Signature

Dear Sir:

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

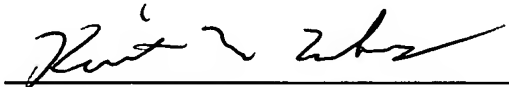
While the information submitted in this Supplemental Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

In accordance with 37 CFR § 1.97, this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

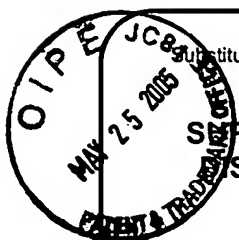
The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

If the sum of \$180.00 is due under 37 CFR § 1.17(p) pursuant to § 1.97, the Commissioner is hereby authorized to charge this fee, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0782/AMAT/5975.P1/KMT.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Keith M. Tackett", is written over a horizontal line.

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Substitute for form 1449A/PTO

# **SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

of 1

|                        |                                |
|------------------------|--------------------------------|
| Application Number     | 10/634,662                     |
| Filing Date            | August 4, 2003                 |
| First Named Inventor   | Chang, et al.                  |
| Group Art Unit         | 1762                           |
| Examiner Name          | Wesley D. Markham              |
| Attorney Docket Number | AMAT/5975.P1/CPI/COPPER/LB/PJS |
| Submission Date        | May 23, 2005                   |

## **U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|-----------------------|------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
|                    |                       | Number-Kind Code <sup>2</sup> (if known) |                                |                                                    |                                                                                 |
|                    | A1                    | US-6887795                               | 05/03/2005                     | SOININEN, ET AL.                                   |                                                                                 |
|                    | A2                    | US-6800937                               | 10/05/2004                     | MARSH, ET AL.                                      |                                                                                 |
|                    | A3                    | US-6800542                               | 10/05/2004                     | KIM                                                |                                                                                 |
|                    | A4                    | US-6780758                               | 08/24/2004                     | DERDERIAN, ET AL.                                  |                                                                                 |
|                    | A5                    | US-6744138                               | 06/01/2004                     | MARSH                                              |                                                                                 |
|                    | A6                    | US-6743739                               | 06/01/2004                     | SHIMAMOTO, ET AL.                                  |                                                                                 |
|                    | A7                    | US-6737317                               | 05/18/2004                     | MARSH, ET AL.                                      |                                                                                 |
|                    | A8                    | US-6627995                               | 09/30/2003                     | PARANJPE, ET AL.                                   |                                                                                 |
|                    | A9                    | US-6596602                               | 03/25/2003                     | RUESCHER, ET AL.                                   |                                                                                 |
|                    | A10                   | US-6576778                               | 06/10/2003                     | UHLENBROCK, ET AL.                                 |                                                                                 |
|                    | A11                   | US-6541067                               | 04/01/2003                     | MARSH, ET AL.                                      |                                                                                 |
|                    | A12                   | US-6517616                               | 02/11/2003                     | MARSH, ET AL.                                      |                                                                                 |
|                    | A13                   | US-6338991                               | 01/15/2002                     | ZHANG, ET AL.                                      |                                                                                 |
|                    | A14                   | US-6114557                               | 09/05/2000                     | UHLENBROCK, ET AL.                                 |                                                                                 |
|                    | A15                   | US-20040241321                           | 12/02/2004                     | GANGULI, ET AL.                                    |                                                                                 |
|                    | A16                   | US-20040105934                           | 06/03/2004                     | CHANG, ET AL.                                      |                                                                                 |
|                    | A17                   | US-20040038529                           | 02/26/2004                     | SOININEN, ET AL.                                   |                                                                                 |
|                    | A18                   | US-20040005753                           | 01/08/2004                     | KOSTAMO, ET AL.                                    |                                                                                 |
|                    | A19                   | US-20030212285                           | 11/13/2003                     | UHLENBROCK, ET AL.                                 |                                                                                 |

## **FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document                                                           | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages or<br>Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|-----------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|----------------|
|                    |                       | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                |                                                    |                                                                                 |                |
|                    | B1                    | WO 03/056612                                                                      | 07/10/2003                     | GENITECH CO., LTD.                                 |                                                                                 |                |

## **NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T <sup>2</sup> |
|--------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|                    | C1                    | International Search Report dated March 11, 2005 regarding International Application No. PCT/US2004/024805 (AMAT/5975PC02PCT)                                                                                                                                  |                |

Examiner

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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